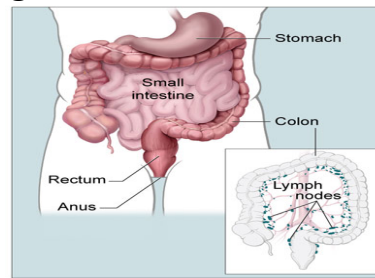


Colon and Rectal Cancer

Figure 6



Definition: Cancers that form in the tissues of the colon (longest part of the large intestine), or cancers that form in the tissues of the rectum (the last several inches of the large intestine closest to the anus).¹

Background: From 2002 to 2006, there was a yearly average of approximately **6,442** newly diagnosed cases of colorectal cancer in Ohio.² During this same time period, Ohio experienced approximately **2,479** deaths each year due to colorectal cancer.²

In Ohio, colorectal cancer is the third most common cancer diagnosed, and it is the second most common cause of cancer-related deaths for both genders combined.³ The mortality rate has declined 20 to 25 percent in Ohio over the past two decades.³ Mortality rates have dropped from 32.9 per 100,000 in 1970 to 20 per 100,000 in 2006.³ The decline in mortality rates is attributed to increased use of colorectal screening, dietary changes, and use of aspirin.³

Cuyahoga County Data:

- The average annual number of newly diagnosed colorectal cancer cases from 2002-2006 was **831**, with an age-adjusted incidence rate of **51.1** per 100,000 people.
- This is **lower** than the **52.1** incidence rate for Ohio and **higher** than the **49.1** incidence rate for the Nation.
- The average annual number of colorectal cancer deaths from 2002-2006 was **328**, with an age-adjusted mortality rate of **19.7** per 100,000 people.
- This is **lower** than the **20.0** mortality rate for Ohio and **higher** than the **18.2** mortality rate for the Nation.

Table 6a Colon and Rectal Cancer

Average Annual Number of Cancer Cases and Age-Adjusted Incidence Rates* for 2002-2006

Incidence	Male		Female		Total	
	Cases	Rate	Cases	Rate	Cases	Rate
Cuyahoga County	405	62.5	426	43.7	831	51.1
Ohio	3,215	61.5	3,208	45.2	6,422	52.1
National SEER		57.3		42.8		49.1

* Rate is calculated per 100,000 people.

Table 6b Colon and Rectal Cancer

Average Annual Number of Cancer Deaths and Age-Adjusted Mortality Rates* for 2002-2006

Mortality	Male		Female		Total	
	Cases	Rate	Cases	Rate	Cases	Rate
Cuyahoga County	160	25.0	168	16.3	328	19.7
Ohio	1,214	24.1	1,265	17.1	2,479	20
National SEER		21.9		15.4		18.2

* Rate is calculated per 100,000 people.

Figure 6a

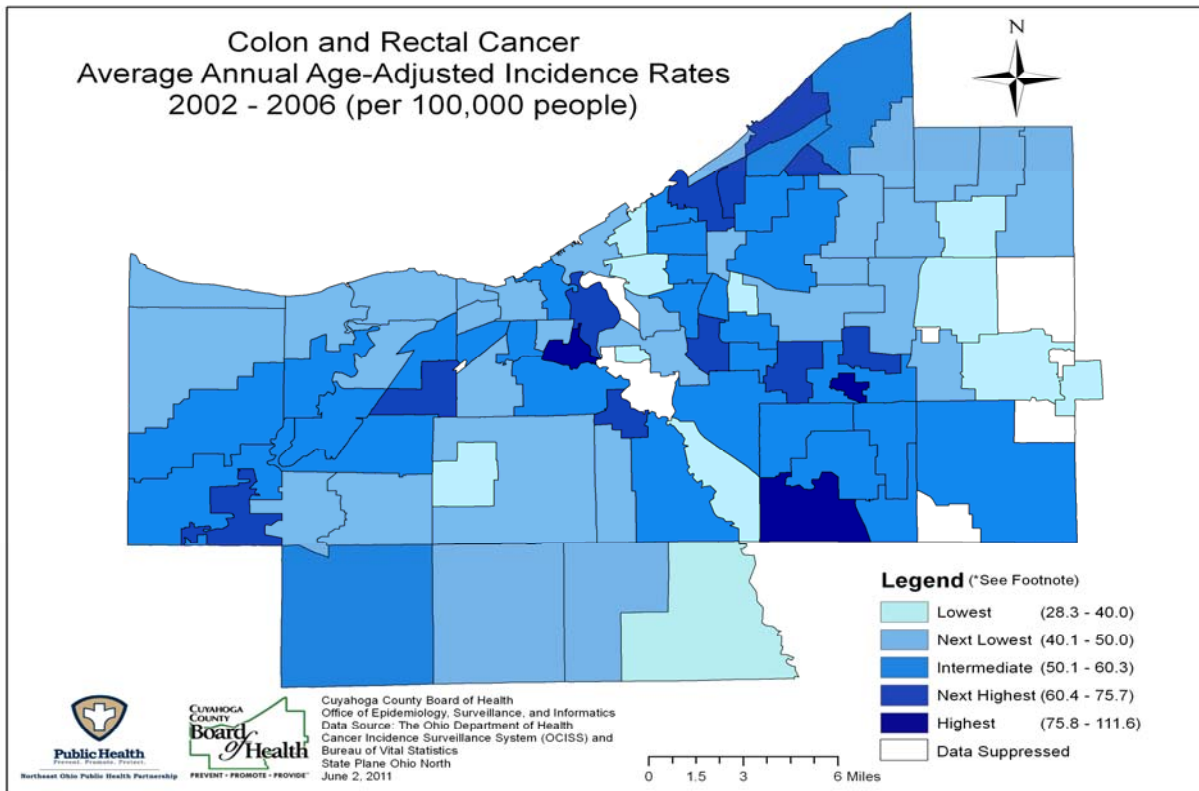
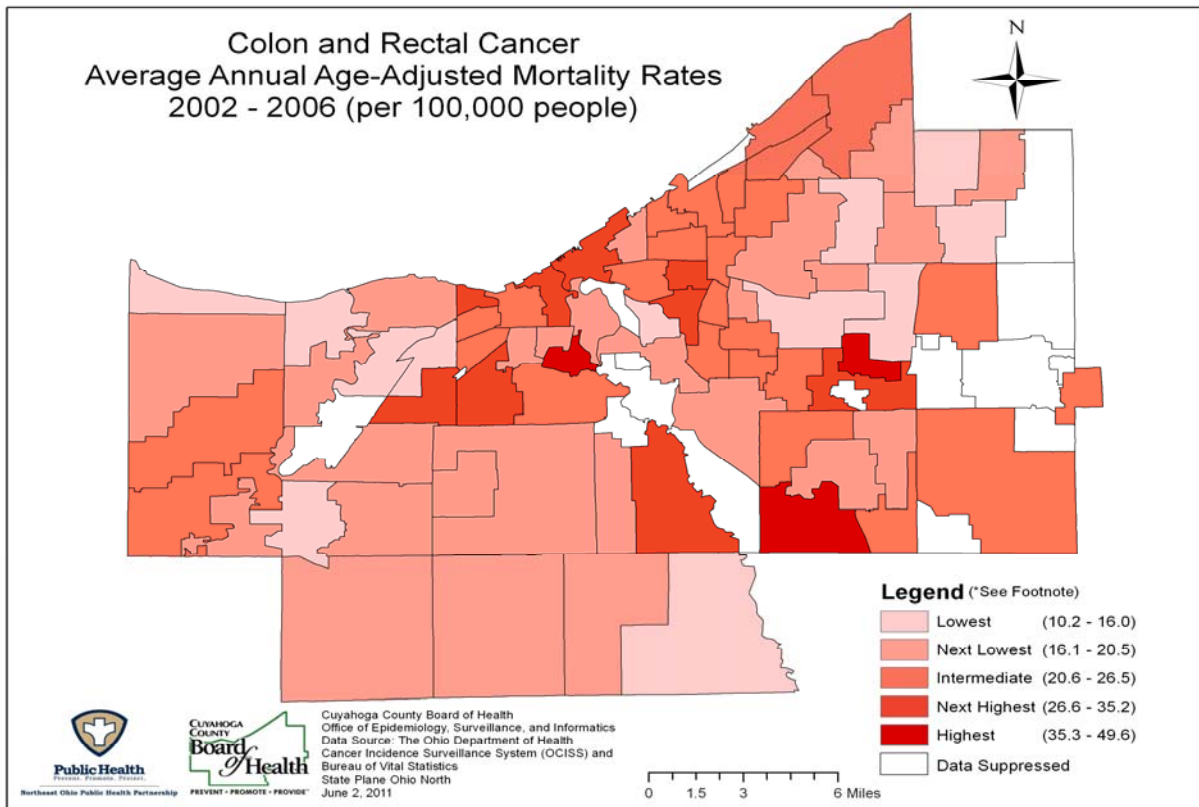


Figure 6b



*Data were suppressed to help maintain confidentiality and /or due to concerns over unstable numbers. See methods/limitations section for additional details.

Chart 6a

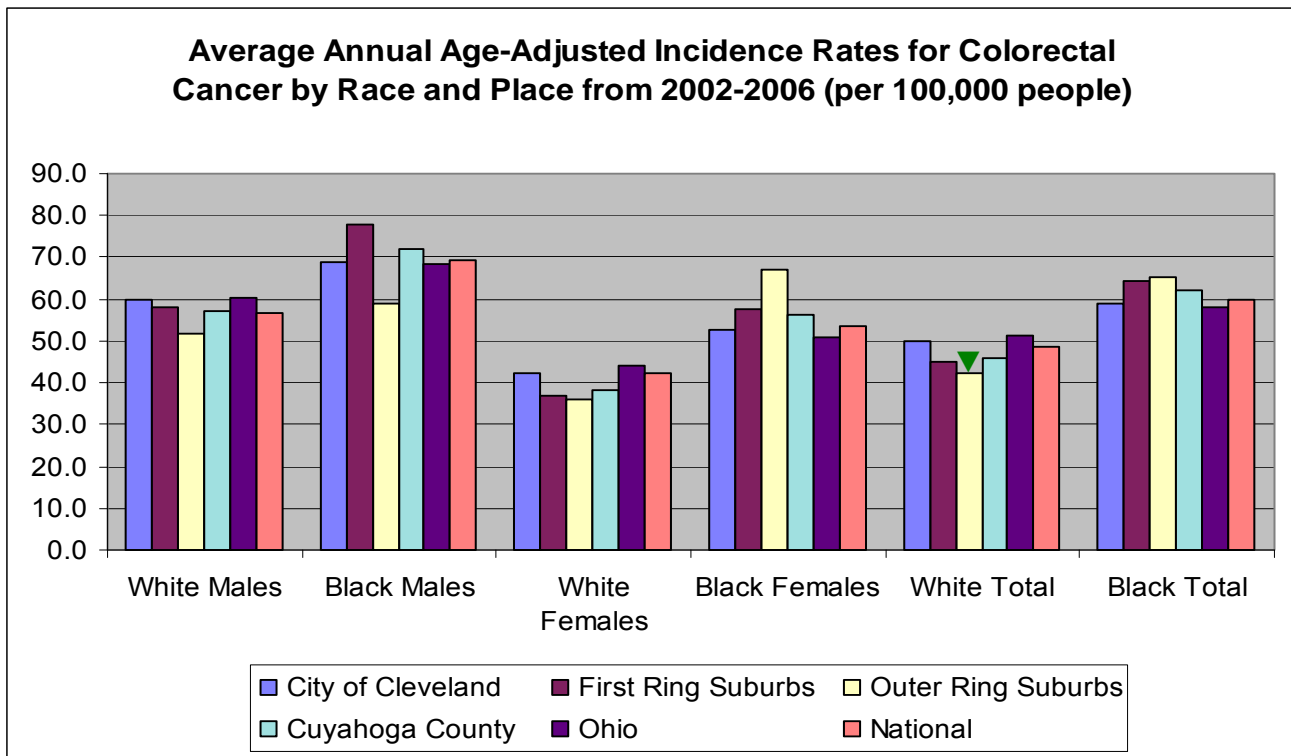
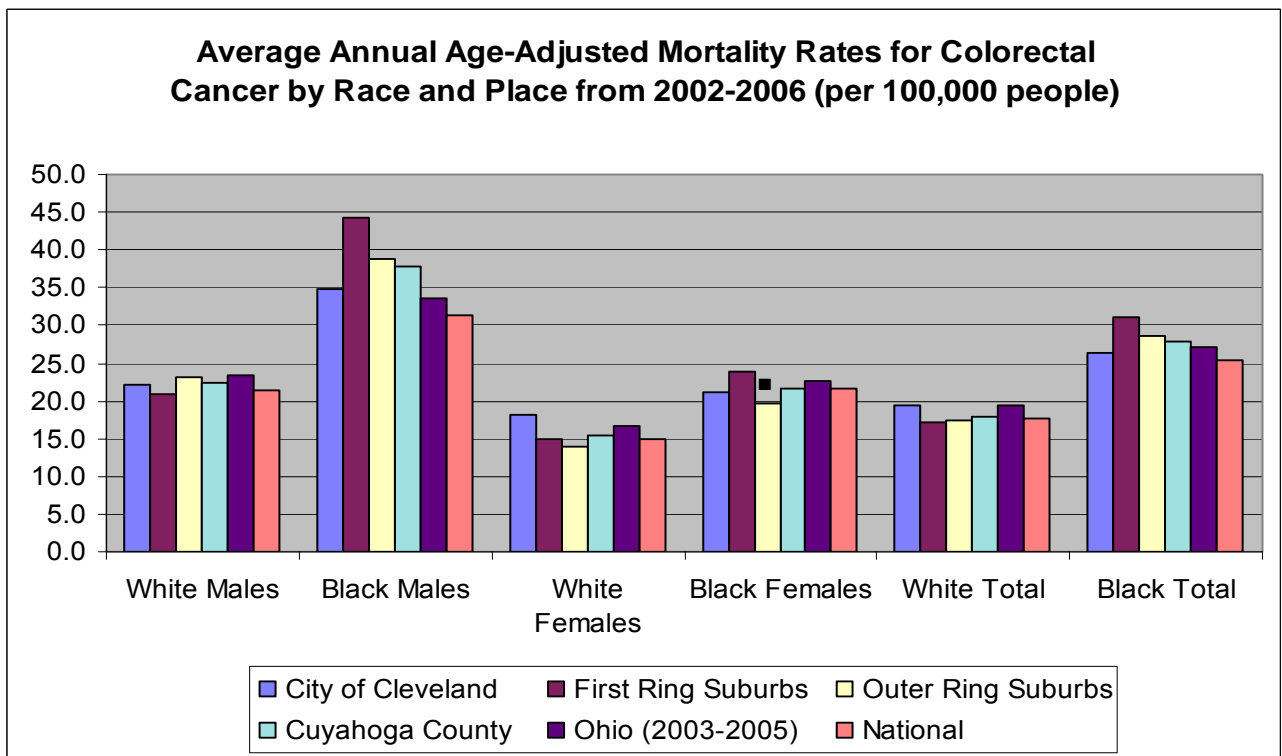


Chart 6b



- ▲ Rates are statistically significantly higher when compared to Cuyahoga County.
- ▼ Rates are statistically significantly lower when compared to Cuyahoga County.
- Rates are not compared to Cuyahoga County when there are <20 cases total for 2002-2006 due to instability.

Risk Factors

Males: In the United States, 1 in 19 males will develop colorectal cancer and 1 in 46 males will die from colorectal cancer.⁴

Females: In the United States, 1 in 20 females will develop colorectal cancer and 1 in 50 females will die from colorectal cancer.⁴

Several risk factors may contribute to the development of colorectal cancer. They include:¹

- **Age** – More than 90% of colorectal cancers occur in individuals 50 and older.
- **Inflammatory bowel disease**
- **Personal or family history of colorectal cancer or colorectal polyps**
- **Inherited syndromes** such as familial adenomatous polyposis (FAP), hereditary non-polyposis colorectal cancer (Lynch syndrome), Turcot syndrome, and Peutz-Jeghers syndrome.
- **Racial and ethnic background** – African Americans have the highest colorectal cancer incidence and mortality rates of all racial groups in the U.S. Jews of Eastern European descent (Ashkenazi Jews) have one of the highest colorectal cancer risks in the world.
- **Lack of regular physical activity**
- **Low fruit and vegetable dietary intake**
- **A low-fiber and high-fat diet**
- **Obesity**
- **Alcohol consumption**
- **Tobacco use**

Symptoms¹

- Rectal bleeding or blood in or on the stool
- Change in bowel habits or stools that are narrower than usual
- Stomach discomfort (bloating, fullness or cramps)
- Diarrhea, constipation or feeling that the bowel does not empty completely
- Weight loss for no apparent reason
- Constant fatigue

Screening, Prevention and Early Detection^{1,5}

Screening and Prevention:

Increased use of colorectal cancer screening by sigmoidoscopy or colonoscopy has been suggested as the potential reason for declines in mortality rates from this cancer.³ Screening can be used to prevent colorectal cancer or find and remove polyps that may eventually become colon cancer.¹ 51% of Ohioans aged 50 and older reported having had a screening sigmoidoscopy or colonoscopy in the past 5 years.³ The risk of colorectal cancer can be reduced by following screening guidelines, eating a healthy, low-fat high fiber diet, and increasing physical activity level.³

Adults aged 50 and older should be screened using one or multiple methods below:

- Fecal Occult Blood Test annually
- Sigmoidoscopy, every 3 years
- Colonoscopy every 10 years starting at age 50, more frequently if polyps are detected, or with a family history of polyps or colon cancer.
- Stool DNA test

One of the Healthy People 2020 cancer goals is to increase the proportion of adults who receive a colorectal cancer screening to 70.5%.⁶ The baseline for this goal was that 54.2% of adults age 50 to 75 years received a colorectal screening based on the most recent guidelines in 2008 (age adjusted to the 2000 standard population).⁶

Staging

Stage at Diagnosis describes the severity of a person's cancer and the extent to which it has or has not spread throughout the body.⁷ Cancer staging is important in helping physicians plan appropriate treatment, as well as to estimate a patient's prognosis.⁷ Cancer diagnosed in the *in situ* and localized stages are generally referred to as early-stage tumors, whereas regional and distant tumors are referred to as late-stage tumors.² Detecting cancers at an early stage may increase long-term survival and can lead to a reduction in mortality.²

The National Cancer Institute groups staging into five main categories:⁷

- ***In situ***: Abnormal cells are present only in the layer of cells in which they developed. In this report, *in situ* cases are only included for bladder cancer.
- **Localized**: Cancer is limited to the organ in which it began, without evidence of spread.
- **Regional**: Cancer has spread beyond the primary site to nearby lymph nodes or organs and tissues.
- **Distant**: Cancer has spread from the primary site to distant organs or distant lymph nodes.
- **Unstaged/Unknown**: There is not enough information to determine the stage.

Chart 6c

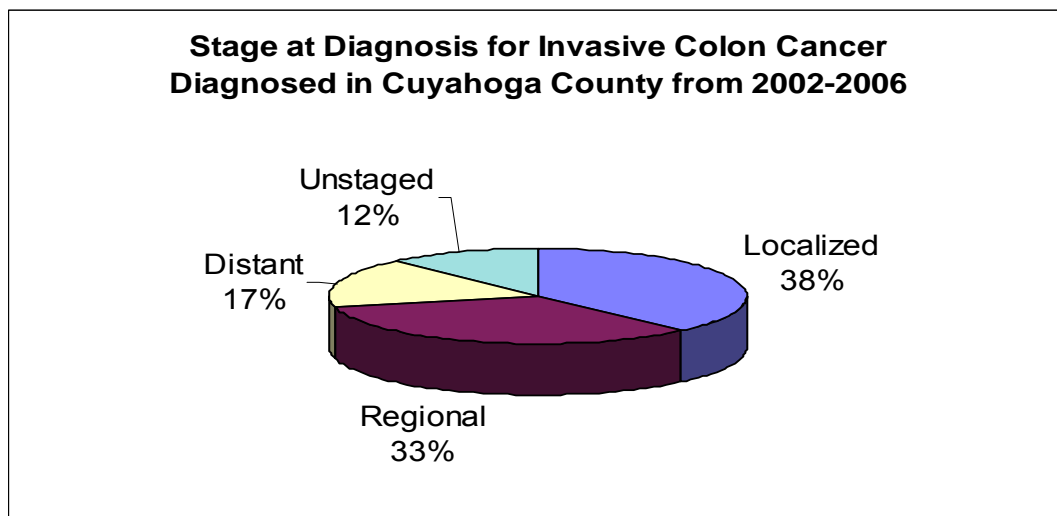


Table 6c

5-year Relative Survival* by Stage at Diagnosis for Colorectal Cancer in the United States for 1999-2006, All Races, Both Sexes ⁸	
Stage at Diagnosis	5-year Relative Survival (%)
Localized (confined to primary site)	90.4
Regional (spread to regional lymph nodes)	69.5
Distant (cancer has metastasized)	11.6
Unknown/Unstaged	38.3

*Relative survival compares observed survival for those with cancer to the expected survival for those without cancer.

Figure 6c

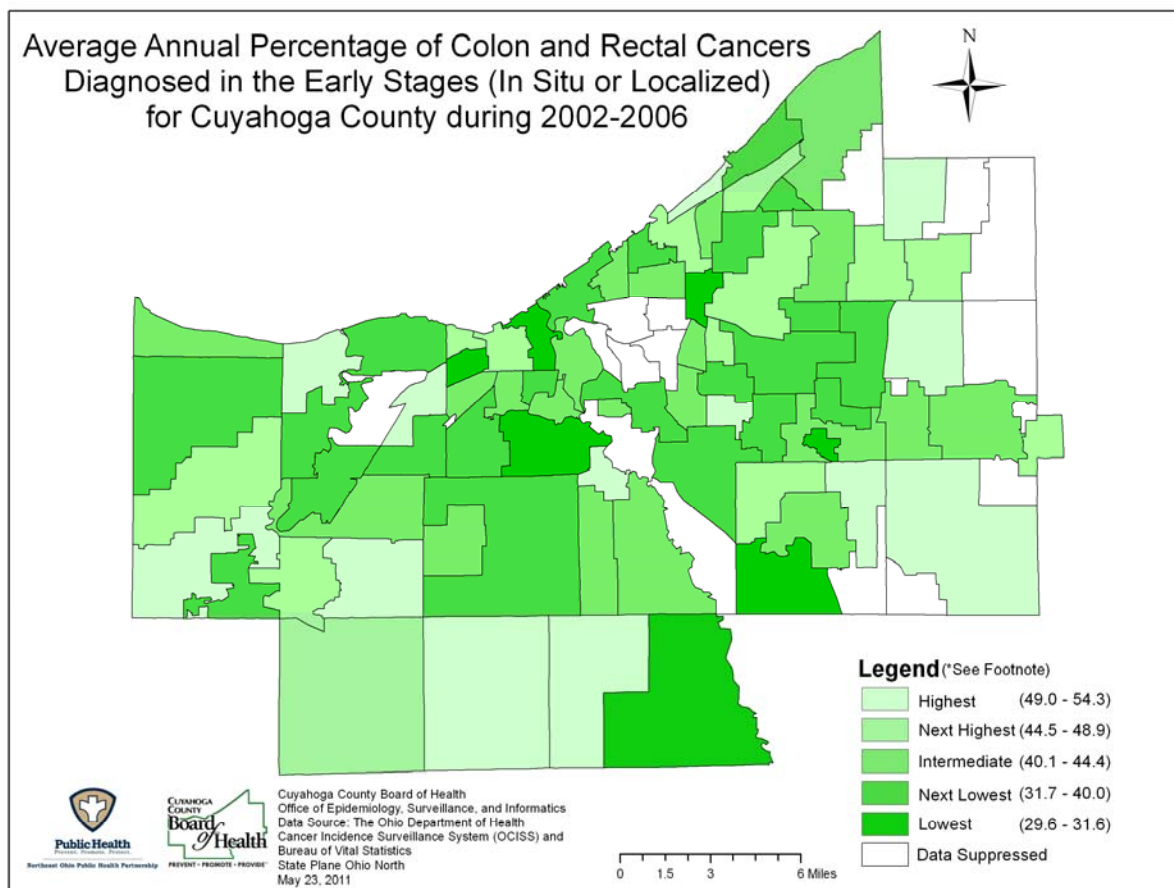
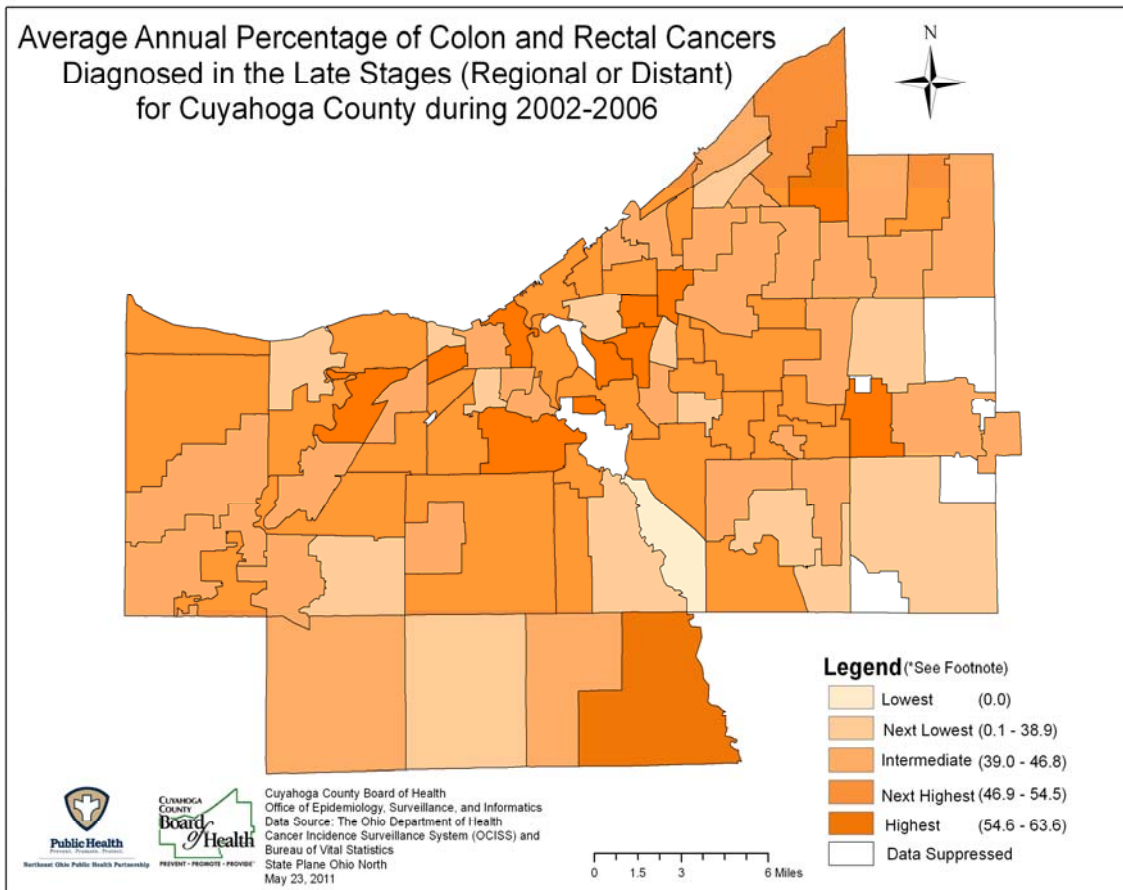


Figure 6d



*Data were suppressed to help maintain confidentiality and /or due to concerns over unstable numbers. See methods/limitations section for additional details.

Chart 6d

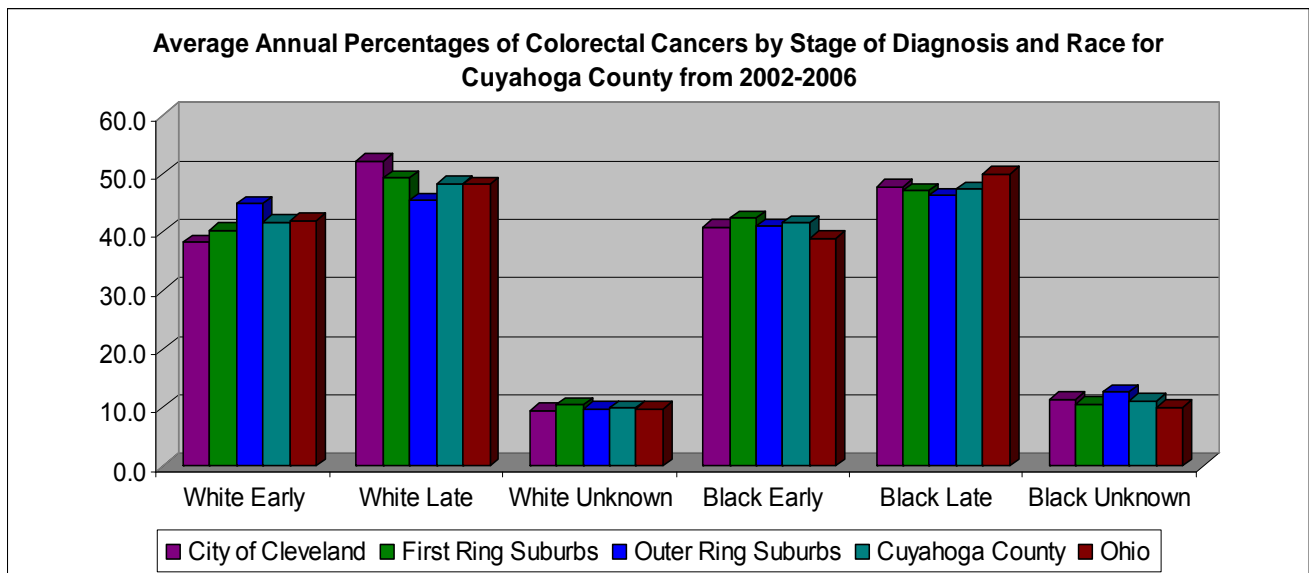
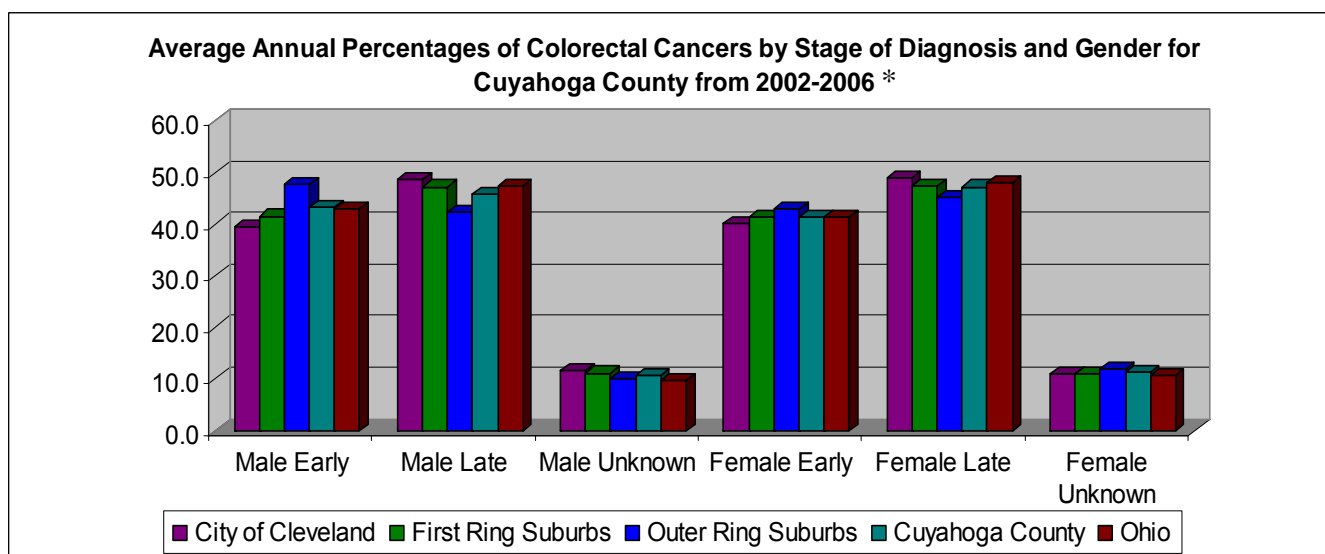


Chart 6



*All races are included in staging calculations.

More Information

National Cancer Institute <http://www.cancer.gov/>

American Cancer Society <http://www.cancer.org>

Ohio Department of Health <http://www.odh.ohio.gov/>

Resources

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